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| 10/518,972 | 01/18/2006 | Ashish Gogia | RLL-262US | 2913 |

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| EXAMINER | |
|---|---|
| MANOHAR, MANU M | |
| ART UNIT | PAPER NUMBER |
| 4161 | |

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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/518,972 | GOGIA ET AL. | |
| | Examiner | Art Unit | |
| | MANU MANOHAR | 4161 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *25 July 2008*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) *22-40* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-21 and 41-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *March 13, 2006, Jan 18, 2006*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

## DETAILED ACTION

### The status of the Claims

Claims 1- 43 are pending in the application. Original claims 1-43 were subjected to restriction and election of species. The details are below.

### Election and Restriction

Applicant's election of Group I, claims 1-21 and 41-43 in the reply filed on July 25, 2008 is acknowledged. The applicant's election of the species in the example 4 is acknowledged. Claims 22-40 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected Group II, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on July 25, 2008.

### Priority

This application has the filing date of January 18, 2006 and is a national stage application of PCT/IB03/02456, filed June 24, 2003 and claims foreign priority of INDIA patent application 673/DEL/2002, filed June 24, 2002. This application is considered with the priority date of June 24, 2002.

### *Claim Rejections - 35 USC § 112*

The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 43 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 43 is drawn to the tablet of claim 1, which is further free or substantially free of both silicon dioxide and microcrystalline cellulose. The term "substantially " in claim 43 is a relative term which renders the claim indefinite. The term "substantially " is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-9, 11, 13-21 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al, US Patent 5,879,706 (listed in IDS).

Claim 1 is drawn to a tablet comprising a hydrated form of valacyclovir hydrochloride having a water of hydration content of more than approximately 3% w/w and a particle size of less than approximately 355 micron. Claim 2 is drawn to a tablet wherein the valacyclovir hydrochloride has a water of hydration content of more than

approximately 4% w/w. Claim 3 is drawn to a tablet wherein the valacyclovir hydrochloride has a water of hydration content of between approximately 3% w/w and approximately 16% w/w. Claim 4 is drawn to a tablet wherein the valacyclovir hydrochloride has a particle size of less than approximately 250 micron. Carter et al teaches the preparation of tablets containing valacyclovir with water of hydration of 3% w/w (Column 3- line 30-35). Carter et al. disclose a tablet having a particle size of approximately 50 micron (Column 11 and 12-Example 8 and 9-Foot Note 1, Example 10 and 11-Foot Note 2). Carter et al do not specifically teach the water of hydration is more than 3 % w/w in the tablet. It would be obvious to modify the water content of the tablet having valacyclovir to develop tablet having about 3% water content. It is known in the art that optimization of water content and the particle size of the tablet would help to improve the binding of the ingredients in the tablet and hence would result in robust formulation having sturdiness as well as the bioavailability of an ingredient like valacyclovir.

Claim 5 is drawn the wherein the valacyclovir hydrochloride concentration comprises at least approximately 50% w/w of the tablet. Carter et al teaches the tablet comprising 50% w/w of valacyclovir (Abstract).

Claim 6 is drawn to the tablet 6 wherein the tablet has a friability and the friability of the tablet does not exceed approximately 1% w/w. Claim 7 is drawn to the tablet wherein the tablet has a hardness and the hardness of the tablet is at least approximately 10 kP. Carter et al teaches the preparation of tablet with friability less than 1% w/w and hardness of atleast 9kP.

Claim 8 is drawn to the tablet further comprising one or more pharmaceutically acceptable excipients. Claim 9 is drawn to the tablet wherein the pharmaceutically acceptable excipients comprise one or more of a filler, binding agent, disintegrant and lubricant. Claim 11 is drawn to the tablet wherein filler comprises from about 5% to about 40% w/w of the tablet. Carter teaches that tablet comprising a filler microcrystalline cellulose. Carter et al also teaches that the percentage of filler, microcrystalline cellulose, in the tablet can range from 3-30% (Column 3- line 49-54, 61-62).

Claim 13 is drawn to the tablet wherein the binding agent comprises between 0.05% and 5% w/w of the tablet. Carter et al teaches that binding agent can be in the range of 1-5% w/w (Column 4 line 1-3). It would be obvious to use the percentage that fall within overlapping range as taught in the Carter reference.

Claim 14 is drawn to the tablet wherein a portion of the binding agent is present extra granularly as a dry binding agent. Claim 15 is drawn to the tablet 15 wherein the extra granular dry binding agent comprises between approximately 0.05% and approximately 2% w/w of the tablet. Carter et al teaches the presence of the binding agent such as povidone extragranularly (Column 11-12- example 8 and 9) and can be present between 1-5% (Column 4- line 1-6) It would be obvious to use the percentage that fall within overlapping range as taught in the Carter reference

Claim 16 is drawn to the tablet wherein the disintegrant comprises one or more of clays, kaolin, bentonite, veegum; celluloses, microcrystalline cellulose, croscarmellose sodium, non-ionic disintegrants, and crospovidone. Claim 17 is drawn to the tablet

wherein the disintegrant comprises from approximately 0.5% to approximately 7% w/w of the tablet. Carter et al teaches the use of clays such as kaolin, bentonie, veegum, celluloses, microcrystalline cellulose, croscarmellose sodium, and crospovidone (Column 4- line 26-30). It also teaches the wherein disintegrant comprises 0.5% to 7% w/w (Column 4- line 19-23).

Claim 18 is drawn the tablet further comprising a film coating. Carter et al teaches film coating for tablets ( Column13 -14- Table 3 – Foot Note 1, Column 15-3-7).

Claim 19 is drawn to the tablet comprising: an intragranular portion comprising at least approximately 50% w/w of a hydrated form of valacyclovir hydrochloride having a water of hydration content of more than approximately 3% w/w and a particle size less than approximately 355 micron, at least one filler, at least one binding agent, and at least one disintegrant; and an extragranular portion comprising at least one lubricant, wherein the friability of the tablet does not exceed approximately 1% and the hardness is at least approximately 10 kP.

Claim 20 is drawn to the tablet comprising: an intragranular portion comprising at least approximately 50% w/w of a hydrated form of valacyclovir hydrochloride having a water of hydration content of more than approximately 3% w/w and particle size less than approximately 355 micron, at least one filler, at least one binding agent, and at least one disintegrant present within the granules of the tablet; and an extragranular portion comprising at least one lubricant and at least one binding agent, wherein the friability of the tablet does not exceed approximately 1%, the hardness is at least approximately 10 kP.

Carter et al teaches the tablet wherein the intragranular portion comprising valacyclovir with water of hydration of 3% and the particle size of approximately 50 micron (Column 2- line 21-26, Column 11 and 12-Example 8 and 9-Foot Note 1, Example 10 and 11-Foot Note 2). It also teaches at least one filler, at least one binding agent, and at least one disintegrant and an extragranular portion comprising at least one lubricant, wherein the friability of the tablet does not exceed approximately 1% and the hardness is at least approximately 10 kP (Column 2- line 21-26). It also teaches disintegrant can present intragranularly as well as extragranularly ( Column 9-10- Example 3-7 Table, First Column under Ingredient)

Claim 42 is drawn to the tablet wherein the valacyclovir hydrochloride has a water of hydration content of more than approximately 3% w/w and a particle size of less than approximately 355 micron. Carter et al teaches the use of valacyclovir with water of hydration of 3% (Column 3- line 30-35) and the particle size of approximately 50 micron (Column 11 and 12-Example 8 and 9-Foot Note 1, Example 10 and 11-Foot Note 2).

Claims 10 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Carter et al. (U.S. Patent No. 5,879,706) as applied to claims 1-9, 11, 13-21, and 41-43 above, and further in view of Midha et al, US Patent Application Publication US 2002/0058061.

Claim 10 is drawn to the tablet of claim 1 wherein the filler comprises one or more of dicalcium phosphate and microcrystalline cellulose. Midha et al teaches the

use of several excipients including filler dicalcium phosphate and mcrocrystalline cellulose (Page 6-Tablet 1 and 1A).

Claim 12 is drawn the tablet wherein the binding agent comprises one or more of hydroxypropyl methylcellulose, hydroxypropyl cellulose and polyvinyl pyrrolidone. Midha et al teaches that tablet containing binding agents, hydroxypropyl methylcellulose hydroxypropyl cellulose and polyvinyl pyrrolidone (Page 3-paragraph [0038] line 3-5).

Carter et al teaches the preparation of hydrated form of valacyclovir tablets (as stated above) with water of hydration of 3% and the particle size of approximately 50 micron. Carter et al does not teach the use of filler dicalcium phosphate and microcrystalline cellulose. Carter et al also does not teach use of binding agents hydroxypropyl methylcellulose, hydroxypropyl cellulose and polyvinyl pyrrolidone. It would be obvious to include the fillers and binding agents of Midha et al. in the tablets of Carter et al. to develop tablets comprising fillers, dicalcium phosphate and microcrystalline cellulose and binding agents, hydroxypropyl methylcellulose, hydroxypropyl cellulose and polyvinyl pyrrolidone. Here the combined teachings of Carter et al , in view of Midha et al makes it prima facie obvious to one of ordinary skill in the art at the time of the invention to use fillers and binding agents stated in the instant claims in the tablets. It is known that fillers like microcrystalline cellulose and binding agent including cellulose ethers (hydroxypropyl cellulose) and polyvinyl pyrrolidone would increase the hardness and reduces the friability of the tablets and hence would result in ideal formulation of active components like valacyclovir in a tablet form.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MANU MANOHAR whose telephone number is (571)270-5752. The examiner can normally be reached on Mon - Thu 9.00AM to 4.00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PATRICK Nolan can be reached on 571-272-0847. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MANU MANOHAR
Examiner
Art Unit 4161

MM

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